daughter, but they did not share intimacies or discuss matters relating to sex, nor did they encourage the girl to develop normal relationships with boys. There were no brothers. Dates were infrequent; she had not gone out with men at all until after graduation from high school. She had been frightened by some of the advances that were made to her by various men, and her husband felt that she was very naive regarding men and the actual mechanics of sex.

The husband was asked to have a thorough talk with his wife and to send her back for additional talks with the author. Subsequently all the facts related by the husband were confirmed. Asked why she had not spoken of these matters before, she merely said that she had not considered the facts important enough to tell. In the course of a few talks, she gained insight into her problem—that she

had actually feared sex and the sex act, and that leukorrhea was actually a defense against it. Care was taken not to offer this explanation to the patient until she herself suggested it. Leukorrhea thereupon dramatically ceased, as did dyspareunia.

#### COMMENT

At the time the present report was being written, the author conferred with various physicians regarding psychosomatic leukorrhea. Most gynecologists consulted agreed that it was a common condition but spontaneously stated that the cause was often not discovered. It would seem, then, that psychic factors should always be considered in the complaint of leukorrhea.

4771 East Grant Avenue, Fresno.

# Nontuberculous Giant Lung Abscess Complicating Tuberculous Bronchostenosis

JOSEPH GOORWITCH, M.D., Los Angeles

A TUBERCULOUS CAVITY occupying most of or an entire pulmonary lobe is not a very rare phenomenon; neither is a nonspecific abscess of similar dimensions. However, a giant abscess occupying the entire upper lobe and developing subsequent to and beneath an adequate thoracoplasty is uncommon, especially when unaccompanied by either symptoms, signs or x-ray findings of an abscess. Such a case constitutes the subject of this report.

## CASE REPORT

The patient, a 34-year-old woman, had had pulmonary tuberculosis diagnosed at the age of 18 in the course of a routine survey at school in 1937. Upon x-ray examination minimal infiltration was noted in both upper lobes. During residence of the patient in sanatoria from 1937 to 1949 no definite evidence of cavitation was found; except for the formation of a dense nodular lesion at the level of the left second anterior intercostal space, there was progressive clearing of the parenchymal lesions in both lungs as late as 1941. Left phrenic crush was performed in 1939 and an anatomically inadequate pneumothorax on the left was maintained from 1941 to 1943.

In 1942 symptoms of tuberculous tracheobronchitis were noted and sputum was found to be positive for tubercle bacilli for the first time. Repeated bronchoscopy in the course of the next few years revealed extensive tuberculous ulceration of the trachea and left bronchus which went on to healing by stenosis of the left stem bronchus. At the same time roentgenograms showed atelectasis of the left

From the Department of Thoracic Surgery, Mount Sinai Hospital, Los Angeles.

Submitted April 12, 1954.

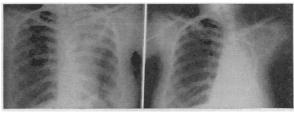


Figure 1.—Left: Roentgenogram (Nov. 24, 1947) showing atelectasis of the left upper lobe. Right: (Dec. 22, 1948) An anatomically satisfactory thoracoplasty but also atelectasis of the entire left lung.

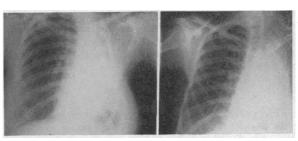


Figure 2.—Roentgenograms shortly before (*left*) and after (*right*) pneumonectomy, showing an almost identical appearance.

upper lobe (Figure 1, left). In 1948 three-stage, seven-rib left thoracoplasty was performed. Thereafter there was atelectasis of the entire lung (Figure 1, right) and the sputum remained positive on culture.

When the patient was first observed at the Mount Sinai Clinic in 1953, upon review of the roentgenograms no evidence was seen of tuberculous activity since the date of thoracoplasty in 1948 (Figure 2, left). At this time there was no growth on culture of three specimens of sputum. The patient said she had had episodes of low-grade fever, pains in the chest and increase in cough over the preceding three years without purulent sputum at any time.

A diagnosis of "destroyed" lung due to atelectasis and bronchiectasis resulting from healed bronchostenosis was made. Left pneumonectomy was carried out October 19, 1953, with the patient in the lateral position. In freeing the lung from its extensive parietal attachments it was noted that the lower lobe was shrunken but the upper was greatly distended and felt tense. In the course of manipulation the upper lobe was accidentally damaged and creamy pus escaped from it into the pleural cavity. It was considered wiser to evacuate the entire contents of the lobe (200 to 300 cc.) than to repair the tear in the lung and run the risk of flooding the tracheobronchial tree with liquid contents of the giant pulmonary abscess. At no time during the operation were pleural contents recovered from the trachea by the anesthetist, nor was there escape of air from the pulmonary abscess, which indicated complete isolation of the abscess from the tracheobronchial tree. The stem bronchus was extremely stenotic and required little in the way of repair. Postoperative recovery was uneventful (Figure 2, right).

Upon pathologic examination\* of the surgical specimen (Figure 3) it was noted that the lower lobe was contracted and moderately bronchiectatic. The upper lobe consisted of a thin-walled trabeculated pus sac with only a very small area of tightly compressed pulmonary tissue near the hilum. The stem and upper lobe bronchi were extremely stenotic and one of the segmental branches was completely obstructed by old fibrosis.

It was noted that in sections through the site of bronchial occlusion the lumen was filled with connective tissue which in places was almost collagenous; there were only a few remnants of bronchial mucosa and glands. Degenerated tissue lined by fibrous wall was observed in sections through the wall of the cavity of the abscess. Sections through the lower lobe showed only pronounced atelectasis. No definite evidence of tuberculosis was found in any of the sectioned tissue. No pyogens or tubercle bacilli were observed on smears of the purulent contents of the abscess, and no tubercle bacilli grew on cultures of the material.

### COMMENT

The interesting feature of the case here reported is the unexpected finding of a giant abscess occupying a completely excavated pulmonary lobe adequately collapsed by thoracoplasty five years earlier. Gradual accumulation of secretions distal to the completely obstructed upper lobe bronchus resulted in pressure that caused necrosis of pulmonary parenchyma with eventual conversion of the lobe into a pus sac. Regardless of whether or not this type of lung abscess can be diagnosed preoperatively, the fact that Lindskog and Liebow¹ put it last on a list of lesions associated with tuberculous bronchostenosis suggests that the incidence is rather low.

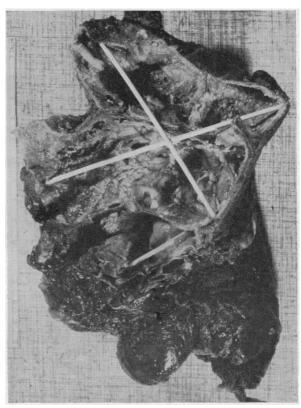


Figure 3.—Fixed gross specimen showing the inner aspect of the excavated upper lobe following evacuation of purulent contents and the compressed lower lobe. Bronchi are extremely stenotic.

#### SUMMARY

An uncommon nontuberculous complication of healed tuberculous bronchostenosis is reported in a patient who 16 years earlier had only minimal parenchymal disease but in whom extensive ulceration of the trachea and left bronchus developed later. Collapse therapy was carried out but the sputum remained positive for tubercle bacilli. A preoperative diagnosis of "destroyed" lung due to healed tuberculous bronchostenosis was made and pneumonectomy performed.

Unexpectedly the resected lung was found to consist of a completely excavated and distended upper lobe containing creamy pus and a shrunken moderately bronchiectatic lower lobe. The upper lobe bronchus was completely obstructed by the healed tuberculous process. Histologic and bacteriologic examination disclosed no evidence of tuberculosis in the bronchus, parenchyma or the purulent contents of the lung abscess.

1052 West Sixth Street, Los Angeles 17.

#### REFERENCE

1. Lindskog, G. E., and Liebow, A. A.: Thoracic Surgery and Related Pathology, 1st ed., Appleton-Century-Crofts, Inc., New York, 1953, pp. 200-202.

<sup>\*</sup>By Irving Matoff, M.D.